PAGE: 1

RAW SEQUENCE LISTING PATENT APPLICATION US/09/276,268

DATE: 03/31/1999

TIME: 14:03:13

Input Set: I276268.RAW

This Raw Listing contains the General Information Section and up to first 5 pages.

```
1
     <110> APPLICANT: Strachan, Lorna
 2
           Sleeman, Matthew
                                             ENTERED
 3
           Abernethy, Nevin
 4
           Onrust, Rene
 5
           Kumble, Anand
 6
           Murison, Greg
 7
     <120> TITLE OF INVENTION: Compounds isolated from stromal cells
 8
           and methods for their use
 9
     <130> FILE REFERENCE: 11000.1037
10
     <140> CURRENT APPLICATION NUMBER: US/09/276,268
11
     <141> CURRENT FILING DATE: 1999-03-25
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12
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13
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     <400> SEOUENCE: 1
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                                                                                   60
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                                                                                   120
           ctgcgggcgt tggatctgtc gggaaactcc ctgaccagct tccaaaagtt caagggcagt
21
                                                                                   180
22
           ttggcccttc ggactctcga cctccgcaga aactctctca cggccctccc tcagagggtt
                                                                                   240
23
           gtgtccgagc agcctctgag gggtctgcag accatctacc tcagccagaa cccttatgac
                                                                                   300
24
           tgctgtgggg tggaaggatg gggggccctg cagcagcact tcaagactgt tgcggacttg
                                                                                   360
25
           tccatggtca cttgcaacct ctcttccaag atcgtccgtg tggtggagct gcccgaaggc
                                                                                   420
26
           ctgcctcagg gctgtaagtg ggaacaggtg gacactggtc tcttctacct cgtgctcatc
                                                                                   480
27
           ctgcccagct gcctcaccct gctggtggcc tgtactgtcg tcttcctcac ttttaagaag
                                                                                   540
28
           cctttqcttc aggtcatcaa gagccgctqc cactqqtcct ccatatactq acccqtqtqc
                                                                                   600
29
           caaggctaga gacttggttt ttcctcgagg atgcgtctct ccgctggatc tttacttttg
                                                                                   660
30
           caggggtcga gtgtgatgca ttgaaggtta aaactgaaat ttgaaagagt tccatcctca
                                                                                   720
31
           gtcccattaa cttctcctcc catccgtgtg atttatcctc attgtcctgg tgaaatattt
                                                                                   780
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                                                                                   803
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38
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                                                                                   55
42
                                                  Met Ala Pro Ala Asn Leu Gly
43
44
           ctg acg ccg cac tgg gtg atg ctc ctc ggt gcc gtg ctg ctg ttg ctt
                                                                                 103
```

PAGE: 2 RAW SEQUENCE LISTING

DATE: 03/31/1999 TIME: 14:03:13 PATENT APPLICATION US/09/276,268

Input Set: 1276268.RAW

														_				
45		Leu	Thr		His	Trp	Val	Met		Leu	Gly	Ala	Val		Leu	Leu	Leu	
46				10					15					20				
47					gcc			_	_		_				_			151
48		Leu		GLY	Ala	ser	Ala		GIu	Pro	Pro	Arg		GIY	Cys	Ser	Glu	
49			25					30					35					
50					aga													199
51			Thr	Asn	Arg	ser		GIU	GIu	Cys	Leu		Asn	Val	ser	Cys		
52		40					45					50					55	
53					gag													247
54		Trp	Cys	Asn	Glu		ьуs	Ата	Cys	Met		Tyr	Pro	val	Arg	_	Ile	
55						60					65					70		005
56					gct			_		_	_		_	_			-	295
57 50		ьeu	Pro	Pro	Ala	ser	ьeu	cys	ьуѕ		ser	ser	Ата	Arg	_	GIY	vai	
58					75					80					85			
59					aac				_				_	_	-	-		343
60		Cys	Trp		Asn	Pne	GIu	Ата		IIe	Ile	Thr	Met		Val	Leu	GTA	
61				90				_ 4	95				•	100				
62					ctc													391
63		GIY		vaı	Leu	ьeu	GIY		Thr	vaı	Cys	Cys	_	Tyr	Cys	Cys	Arg	
64			105					110					115					
65.					agc										_	_	_	439
66			гуѕ	гÀг	Ser	Arg		Pro	Asp	гÀг	ser	_	GIU	Arg	Ата	Met	_	
67		120					125					130					135	
68					gag					_		_				_	-	487
69 70		GIU	GIII	GIU	Glu		Arg	vaı	Arg	GIN		GIU	Arg	Arg	Ата		Met	
70			.			140					145					150		505
71					cat									-			-	535
72 73		гуз	ser	Arg	His 155	Asp	GIU	TTE	Arg	_	гуѕ	Tyr	GIY	Leu		гуѕ	GIU	
73 74			226	~~~		~~~	224	++-	+	160				~+ + <i>.</i>	165		_	E0.C
7 5 75					tat Tyr				Laaç	99 - 99	JCC S	yyca	Jaca	יו ני	, Lyg	Lyya	L	586
75 76		GIII	ASII	170	ıyı	GIU	цуъ	FIIC										
70 77		cata	70201		22426	*+++	70 to		+~~	a t			~~~	-a+a			atasaa	646
78					ccctt									ccg	-ay c	ayacı	ctcacc	689
79	<210>					gact	or gs	ggcg	1000		igcci	Julia	ccg					003
80	<211>	-																
81	<211>																	
82	<213>				nuse													
83	<400>				Jube													
84	1200 2				aaaca	retae	ים מנ	יממרי	rtata		acada	aacc	taca	atcol	-ca d	rator	ccgccc	60
85											-		_			_	aacttc	120
86																	gtgtc	180
87																	tttggc	240
88										_				_		_	tgtagg	300
89																	gtggac	360
90																	cctctg	420
91																	gcagcc	480
92																	cccag	540
93																	ctcctt	600
94					gccca			, , ,	3 3 \					,	י בכי			619
		5 5	,	-~J :	,		-											017

RAW SEQUENCE LISTING DATE: 03/31/1999 TIME: 14:03:13 PAGE: 3

PATENT APPLICATION US/09/276,268

Input Set: 1276268.RAW

													•					
95	<210>	SEQ	ID I	NO 4														
96	<211>				0													
97	<212>																	
98	<213> ORGANISM: Mouse																	
99	<220>	FEA'	TURE	:														
100	<221>	NAM	E/KE	Y: C	DS													
101	<222>					(8	49)											
102	<221>																	
103	<222>	LOC	ATIO	N: (46).	(1	50)											
104	<400>	SEQ	UENC	E: 4														
105		ggc	gcgt	gag (cctca	agga	tg a	accci	tgtgi	t tt	ccta	qcgg	gct	qt a	tg q	ct c	tc ggt	57
106				_			-				•		•	_			eu Gly	
107														-:	35			
108		ttt	tct	caa	cgc	tcc	cgt	atg	gtg	gcc	gcg	ggt	gcc	ggg	gtg	acc	cgg	105
109		Phe	Ser	Gln	Arg	Ser	Arg	Met	Val	Ala	Ala	Gly	Āla	Gly	Val	Thr	Arg	
110			-30					-25					-20					
111		ctg	cta	gtg	ctc	ttg	ctg	atg	gta	gcc	gcg	gct	cct	agc	aga	gcc	cga	153
112		Leu	Leu	Val	Leu	Leu	Leu	Met	Val	Ala	Ala	Ala	Pro	Ser	Arg	Ala	Arg	
113		-15					-10					-5					1	
114		ggc	agc	ggc	tgc	cgg	gtc	ggg	gcc	tcc	gcg	cgt	ggg	acc	ggg	gcc	gat	201
115		Gly	Ser	Gly	Cys	Arg	Val	Gly	Ala	Ser	Ala	Arg	Gly	Thr	Gly	Ala	Asp	
116					5					10					15			
117			cgt			_	. –	_				_	_	_	_			249
118		Gly	Arg		Ala	Glu	Gly	Cys	_	Thr	Val	Ala	Leu		Leu	Glu	His	
119				20					25					30				
120			ttt															297
121		Ser	Phe	Glu	Leu	Gly	Asp		Ala	Asn	Phe	Gln	_	Arg	Gly	Leu	Leu	
122			35					40					45			•		
123			tgg		_	_	_			_	_	_		-	_	_		345
124			Trp	Asn	GIn	GIn	-	GIA	Thr	Leu	Ser		Thr	Gln	Arg	Gln		
125		50					55					60					65	
126		_	gag		_	-		_			_		_	_	_			393
127		ser	Glu	GIU	GIU	_	GIY	Arg	ьeu	Arg	_	vaı	Ala	Ala	vaı		GIY	
128 129		ata	t = a	200	~+~	70	~+ ~	~~~		~~~	75					80		447
130			tac Tyr					_							_			441
131		Leu	ıyı	Arg	85	Arg	· vai	PIO	Arg	90	PIO	GIY	1111	пеп	95	GTÅ	ser	
132		gaa	gct	aac		cat	ata	tat	taa		ata	cca	aca	tac		cta	ata	489
133			Ala															403
134		<u> </u>		100	O-y		V 44 ±	501	105	1110	vai	110	ALU	110	DCI	шси	Val	
135		αaα	tcg		ctt	t.ca	gac	caq		acc	tta	cac	ata		ata	act	aac	537
136			Ser															
137			115					120					125				0-1	
138		aac	gtg	ata	aac	cta	tct		ata	ata	tac	cct		aac	tac	caa	aac	585
139			Val															
140		130			4		135				4 -	140	- 4	- 4	4 ~	ر -	145	
141			gag	gtg	gaa	gat	gag	gac	ctg	gag	ctq		aat	aca	tct	gtq		633
142			Glu															
143						150		-			155					160		
144		ctg	cgg	cct	ccc	agc	act	gct	cca	ggc	ccc	gag	act	gca	gcc	ttc	att	681
		_				-				-		_						

OIPE -

PAGE: 4 RAW SEQUENCE LISTING DATE: 03/31/1999 TIME: 14:03:13

PATENT APPLICATION US/09/276,268

	Input Set: 1276268.	, RAW
145	Leu Arg Pro Pro Ser Thr Ala Pro Gly Pro Glu Thr Ala Ala Phe Ile	
146	165 170 175	
147	gag cgc ctg gag atg gag cag gcc cag aag gcc aag aac cca cag gag	729
148	Glu Arg Leu Glu Met Glu Gln Ala Gln Lys Ala Lys Asn Pro Gln Glu	
149	180 185 190	
150		777
151	Gln Lys Ser Phe Phe Ala Lys Tyr Trp Met Tyr Ile Ile Pro Val Val	
152	195 200 205	
153		825
154	Leu Phe Leu Met Met Ser Gly Ala Pro Asp Ala Gly Gly Gln Gly Gly	
155	210 215 220 225	
156		879
157	Gly Gly Gly Gly Ser Ser Arg	
158	230	
159		939
160		999
161		059
162		119
163		179
164		239
165		299
166		359
167		419
168		479
169		539
170		599
171		630
172	<210> SEQ ID NO 5	
173	<211> LENGTH: 1197	
174	<212> TYPE: DNA	
175	<213> ORGANISM: Mouse	
176	<220> FEATURE: <221> NAME/KEY: CDS	
177	·	
178	<222> LOCATION: (346)(543)	
179	<pre><221> NAME/KEY: sig_peptide </pre>	
180 181	<222> LOCATION: (346)(420)	
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184		
184 185		180 240
186		300
187		357
188	Met Asp Phe Leu	,,,
189	-25	
190		405
191	Val Leu Phe Leu Phe Tyr Leu Ala Phe Leu Leu Ile Cys Val Val Leu	
192	-20 -15 -10	
193		453
104	The Con The Dre Mar Ton Con Con Ton Ton The West Ton Con	

Ile Cys Ile Phe Thr Lys Ser Gln Arg Leu Lys Ala Val Val Leu Gly

194

Please Note:
Use of n and/or Xan have been detected the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <22.

<223 > fields of each sequence which presents at least one n or Xan.

OIPE

PAGE: 5 RAW SEQUENCE LISTING DATE: 03/31/1999
PATENT APPLICATION US/09/276,268 TIME: 14:03:13

Input Set: 1276268.RAW

	impus soci ilivolo											
195	-5 1 5 10											
196	gga gca cag gta gca ctg gtc ctt ggg tac tgc ccg gat gtg aat act	501										
197	Gly Ala Gln Val Ala Leu Val Leu Gly Tyr Cys Pro Asp Val Asn Thr											
198	15 20 25											
199	gtg tta ggt gct agt ctg gaa ggc tca caa gac aag ggg atg	543										
200	Val Leu Gly Ala Ser Leu Glu Gly Ser Gln Asp Lys Gly Met											
201	30 35 40											
202	tgagtettgt etttaateet ggeaettggg aggetgagge tteggggeea gttggggeta	603										
203	catcgcaaga gcctgtgtcc aaacaaacaa aacgttgtct ttttgctttg agataggtcg	663										
204	aataggtcga attttcaagg ttggcttttt aaacagtgtg taatgtctgt atttggttgt	723										
205	gactcctgtt tgcctagaca tgcttgtagc aggtgtgaac tcaggaggac acaagtgacc	783										
206	agaaagctga gcatctagct gtcaatcttc ccttcacatt gtcccatctg tcttcccttg	843										
207	ggggtcaaag caaagtgggg gcaagtagcc acgaaggggt tgacttggga ggaccctggg	903										
208	gatctggagg ccaatcttga gcatggagca gacctgaggg ttagggaagc ccacgtccac	963										
209	agcageetet geacaceeee ttteeecaca gaeteeaaca gaeacattet gtgeagteaa	1023										
210	ggtagaaatg gaggtgttct ctacacctcc taaatcctag cacttaggaa gctgaggcag	1083										
211	gattatgaat tecaggetag etegggttat gtaatgagae tgttteaaae acagagegga	1143										
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221	<222> LOCATION: (2)(46)											
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224	Met Gly Ala Val Trp Ser Ala Leu Leu Val Gly Gly Leu Ala Gly											
225	-15 -10 -5 1	07										
226 227	gcg ctc atc ctg tgg ctg ctg cgg gga gac tct ggg gcc ccg ggg aaa Ala Leu Ile Leu Trp Leu Leu Arg Gly Asp Ser Gly Ala Pro Gly Lys	97										
227	5 10 15											
229	gac ggg gtt gcg gag ccg ccg cag aag ggc gca cct cct ggg gag gct	145										
230	Asp Gly Val Ala Glu Pro Pro Gln Lys Gly Ala Pro Pro Gly Glu Ala	143										
231	20 25 30											
232	geg gee eeg gga gae ggt eeg ggt ggt gge agt gge gge etg age	193										
233	Ala Ala Pro Gly Asp Gly Pro Gly Gly Gly Ser Gly Gly Leu Ser											
234	35 40 45											
235	cct gaa cct tcc gat cgg gag ctg gtc tcc aaa gca gag cat ctt cga	241										
236	Pro Glu Pro Ser Asp Arg Glu Leu Val Ser Lys Ala Glu His Leu Arg											
237	50 55 60 65											
238	gaa agc aac gga cat ttg att tct gag agc aaa gat ctt ggt aac ctg	289										
239	Glu Ser Asn Gly His Leu Ile Ser Glu Ser Lys Asp Leu Gly Asn Leu	-										
240	70 75 80											
241	ccg gaa gca cag cgg ctg cag aat gtt gga gca gac tgg gtc aat gcc	337										
242	Pro Glu Ala Gln Arg Leu Gln Asn Val Gly Ala Asp Trp Val Asn Ala											
243	85 90 95											
244	aga gag ttt gtt cct gtt ggg aag att cca gac aca cac tcc agg gcc	385										

PAGE: 6

VERIFICATION SUMMARY
PATENT APPLICATION US/09/276,268

DATE: 03/31/1999

TIME: 14:03:13

Input Set: 1276268.RAW

Line ? Error/Warning Original Text

288 W Invalid/Missing Amino Acid Numbering

291 W "N" or "Xaa" used: Feature required cctgcagata atgcttcctg taanctggca cttgtccc